CLAIMS

1.   (Original) A cache-accessing system having a binary tree with decision nodes, comprising:

a cache comprising a plurality of sets;

a replacement management table employable for managing a replacement policy of information associated with the plurality of sets;

a pseudo least recently used function employable to determine the least recently used set of the cache;

an override signal line employable to enable an overwrite of a decision node of the binary tree; and

a value signal line employable to overwrite the decision node of the binary tree.

2.   (Original) The system of Claim 1, wherein the replacement management table is manageable by software.

3.   (Original) The system of Claim 1, wherein the replacement management table contains indicia corresponding to a locked set.

4.   (Original) The system of Claim 1, wherein the replacement management table contains indicia corresponding to a streaming set.

5.   (Original) The system of Claim 1, wherein the replacement management table is employable to receive a class identifier indicia.

6.   (Original) The system of Claim 1, wherein the cache is an eight-way associative cache.

7.   (Original) The system of Claim 1, wherein the value signal line is further employable to transmit an instruction for altering a traversal of the binary tree.

8.   (Original) The system of Claim 1, wherein the output of the decision node of the binary tree is coupled to a multiplexer.

9.   (Original) The system of Claim 1, wherein the replacement management table further comprises a class identifier row corresponding to a default entry.

10.   (Original) The system of Claim 1, wherein the replacement management table is employable to default multiple locked sets of the cache for a classID indicia.

11.   (Original) The system of Claim 1, wherein the software managing the replacement management table is employable to minimize the total number of decision nodes modified in the binary tree when modifying the node of the binary tree.

12.   (Original) The system of Claim 1, wherein the cache is a level two cache.

13.   (Original) The system of Claim 1, wherein the cache is a translation look aside buffer cache.

14.   (Original) A cache accessing method employing a replacement management table to modify decision nodes of a pseudo least recently used binary tree implementation, comprising:

generating a tag control replacement indicia as a function of an entry in the replacement management table and a class identifier indicia;

extracting information from the tag control replacement indicia;

creating an override signal for an associated decision node of the binary tree as a function of the extracted information;

creating a value signal for the associated decision node of the binary tree as a function of the extracted information; and

overwriting the associated decision node as a function of the value signal if the override signal enables the modification.

15.   (Original) The method of Claim 14, further comprising traversing the binary tree from the root decision node to a leaf node correlating to a set of the cache.

16.   (Original) The method of Claim 14, further comprising modifying the decision node of the binary tree during a traverse of the binary tree.

17.   (Original) The method of Claim 15, further comprising reading information from the leaf node.

18.   (Original) The method of Claim 15, further comprising replacing information in the leaf node.

19.   (Original) The method of Claim 14, wherein the override signal is a function of a class identifier.

20.   (Original) The method of Claim 14, wherein the value signal is a function of a class identifier.

21.   (Original) The method of Claim 14, further comprising generating a class identifier, wherein the class identifier is employable by the replacement management table.

22.   (Original) The method of Claim 14, wherein the data within the replacement management table is modifiable by software.

23.   (Currently Amended) A computer program product for employing a replacement management table to modify decision nodes of a pseudo least recently used binary tree implementation, the computer program product having a computer-readable medium with a computer program embodied thereon, the computer program comprising:

computer code for generating a tag control replacement indicia as a function of an entry in the replacement management table and a classID;

computer code extracting information from a tag control replacement indicia;

computer code for creating an override signal for an associated decision node of the binary tree as a function of the extraction;

computer code for creating a value signal for the associated decision node of the binary tree as a function of the combination; and

computer code for overwriting the associated decision node as a function of the value signal if the override signal enables the modification.

24. (Original) A processor for employing a replacement management table to modify decision nodes of a pseudo least recently used binary tree implementation, the processor including a computer program comprising:

computer code for generating a tag control replacement indicia as a function of an entry in the replacement management table and a classID;

computer code for extracting information from a tag control replacement indicia;

computer code for creating an override signal for an associated decision node of the binary tree as a function of the extraction;

computer code for creating a value signal for the associated decision node of the binary tree as a function of the combination; and

computer code for overwriting the associated decision node as a function of the value signal if the override signal enables the modification.